

**STATE OF NEW HAMPSHIRE
INTER-DEPARTMENT COMMUNICATION**

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Date January 4, 2012

Offices
Dept of Environmental Services
Water Division

SUBJECT Proposed Rulemaking for Env-Wq 1700 *et seq.*
Pertaining to criteria for class A waters

TO Water Quality Standards Advisory Committee

In RSA 485-A:8 the Legislature established two classes or grades of surface waters: A and B. Class A waters were described as being of the highest quality, class B of the second highest quality. RSA 485-A:8 prohibits the discharge of any sewage or wastes into class A waters and states that class A waters “shall be considered as being potentially acceptable for water supply after adequate treatment.” Discharges of sewage or waste are permitted in class B waters, but only after treatment to ensure that designated uses are supported.

The New Hampshire Surface Water Quality Regulations (Env-Wq 1700 *et seq.*) were adopted under RSA 485-A:6 and 485-A:8, VI. These regulations contain water quality criteria for class A and class B waters. The criteria for benthic deposits, oil and grease, color, turbidity, slicks, odors, and surface floating solids, temperature, nitrogen and phosphorus, and pH in class A waters are expressed as “none unless naturally occurring.” For class B waters the criteria are expressed in terms of designated use support or numeric criteria. Env-Wq 1702.29 defines naturally occurring conditions as “conditions which exist in the absence of human influences.”

For several years, the Water Quality Standards Advisory Committee discussed ways to interpret the criteria for class A waters. Strict interpretation of the regulations effectively prevents development in the watersheds of class A waters because this would violate the requirement for “conditions which exist in the absence of human influences.” Attempts were made, without success, to formulate a quantitative methodology for distinguishing between naturally occurring and anthropogenic origin for these parameters. Ultimately, in November 2009, the WQSAC approved a proposal to change the criteria for benthic deposits, oil and grease, color, turbidity, temperature, nitrogen and phosphorus, and pH in class A waters. In place of the “as naturally occurring” language, the criteria for class A waters would have to support existing and designated uses. The proposal added a provision that would require antidegradation review for activities in class A watersheds and specifies that any degradation in class A waters shall be significant and therefore must demonstrate social and economic justification. This antidegradation review would preserve the high quality of class A waters by only permitting a lowering of water quality if the net social and economic benefits of an activity outweigh the environmental impact that could be caused by the lower water quality per Env-Wq 1708.10(b)(3).

In 2010, DES decided to wait before going forward with the rulemaking proposal. At that time, legislative study commissions on land use and stormwater were still finishing their work and the WQSAC had just started a process to overhaul the classification system for New Hampshire waters. DES wanted to be sure that the rule changes were consistent with recommendations from the study commissions and the WQSAC classification update. DES also recognized that there would be a large number of stakeholders

interested in changes to the criteria for class A waters and wanted to have adequate time for input and consultation.

The legislative study commissions have now completed their work and the WQSAC classification update subcommittee has been meeting for a year. The consensus from the WQSAC subcommittee is that the class A and class B system should be replaced by a system that more accurately reflects designated uses in the water bodies. This new approach will require a change to the statute, RSA 485-A, and will likely take many years to fully implement. In the meantime, the difficulties of working with criteria for class A waters that are unattainable are mounting. Proposals for road construction, development, and water transfers in class A watersheds require an increasing amount of time and resources by DES and applicants to attempt to comply with the unattainable criteria. Therefore, in 2012, DES is proposing to move forward with the rulemaking language that the WQSAC approved in 2009. This action is consistent with the WQSAC efforts to update the classification system for New Hampshire's water quality standards. Expressing the water quality criteria for class A waters in terms of designated uses is a necessary first step toward replacing the existing classifications with designated use assignments.

Action Items:

- 1. DES requests that the WQSAC review the proposed rulemaking text (below) again and suggest any changes before DES drafts language for attorney review. Changes in the rulemaking text from the 2009 proposal are marked and explained with comments.**
- 2. DES also requests input on process to engage relevant stakeholders about the proposed rulemaking.**

Rulemaking Proposal for Class A Criteria and Protection

(Deleted text shown in ~~strike through~~. Added text shown in ***bold italics***. Clarifying notes in [blue text].)

Readopt with amendment Env-Wq 1703.08 through Env-Wq 1703.14, eff. 5-21-08 (doc. #9162), to read as follows:

Env-Wq 1703.08 Benthic Deposits. ~~(a) Class A waters shall contain no benthic deposits, unless naturally occurring. (b) Class A~~ ***and class*** B waters shall contain no benthic deposits that ***would impair*** have a detrimental impact on the benthic community ***any existing or designated uses***, unless naturally occurring.

[Note: The language for Env-Wq 1703.08 approved by the WQSAC in 2009 was slightly different. It retained the “have a detrimental impact on” language from the existing criteria. This language was changed to “would impair” to be consistent with the other criteria.]

Env-Wq 1703.09 Oil and Grease. ~~(a) Class A waters shall contain no oil or grease, unless naturally occurring. (b) Class A~~ ***and class*** B waters shall contain no oil or grease in such concentrations that would impair any existing or designated uses.

Env-Wq 1703.10 Color. ~~(a) Class A waters shall contain no color, unless naturally occurring. (b) Class A~~ ***and class*** B waters shall contain no color in such concentrations that would impair any existing or designated uses, unless naturally occurring.

Env-Wq 1703.11 Turbidity.

~~(a) Class A waters shall contain no turbidity, unless naturally occurring.~~

~~(b)~~ ***(a)*** Class ***A and class*** B waters shall not exceed naturally occurring conditions by more than 10 NTUs.

~~(c)~~ ***(b)*** Waters identified in RSA 485-A:8, III shall contain no turbidity of unreasonable kind or quality.

~~(d)~~ ***(c)*** For purposes of state enforcement actions, if a discharge causes or contributes to an increase in turbidity of 10 NTUs or more above the turbidity of the receiving water upstream of the discharge or otherwise outside of the visible discharge, a violation of the turbidity standard shall be deemed to have occurred.

Env-Wq 1703.12 Slicks, Odors, and Surface Floating Solids.

~~(a) Class A waters shall contain no slicks, odors, or surface floating solids, unless naturally occurring.~~

~~(b)~~ ***(a)*** Class ***A and class*** B waters shall contain no slicks, odors or surface floating solids that would impair any existing or designated uses, unless naturally occurring.

~~(c)~~ ***(b)*** Waters identified in RSA 485-A:8, III shall be free from slicks, odors, and surface floating solids of unreasonable kind or quantity.

[Note: The criteria for Env-Wq 1703.12 was not in the original draft approved by the WQSAC in

2009. It has been added to this proposal so that all class A criteria have the same wording.]

Env-Wq 1703.13 Temperature.

(a) There shall be no change in temperature in class A waters, ~~unless naturally occurring that would impair any existing or designated uses, unless naturally occurring.~~

(b) Temperature in class B waters shall be in accordance with RSA 485-A:8, II, and VIII.

[Note: The criteria for Env-Wq 1703.13 was slightly different in the original draft approved by the WQSAC in 2009. The class A criteria only related to increases in temperature. The current wording of the criteria, which refers to a “change” in temperature, was deemed more appropriate. The language about temperature “interfering” with designated uses was changed to “would impair” to match the other criteria.]

Env-Wq 1703.14 Nutrients.

~~(a) Class A waters shall contain no phosphorus or nitrogen unless naturally occurring.~~

~~(ba)~~ Class **A and class** B waters shall contain no phosphorus or nitrogen in such concentrations that would impair any existing or designated uses, unless naturally occurring.

~~(eb)~~ Existing discharges containing ~~either~~ phosphorus or nitrogen, **or both**, which encourage cultural eutrophication shall be treated to remove phosphorus or nitrogen, **or both, as applicable**, to ensure attainment and maintenance of water quality standards.

~~(dc)~~ There shall be no new or increased discharge of **sewage or waste containing** phosphorus **or nitrogen, or both**, into lakes or ponds **or to tributaries of lakes or ponds**.

~~(e) There shall be no new or increased discharge(s) containing phosphorus or nitrogen to tributaries of lakes or ponds that would contribute to cultural eutrophication or growth of weeds or algae in such lakes and ponds.~~

Readopt with amendment Env-Wq 1703.18, eff. 5-21-08 (doc. #9162), to read as follows:

Env-Wq 1703.18 pH. ~~(a) The pH of Class A waters shall be as naturally occurs. (b) The pH of class A and class B waters shall be 6.5 to 8.0, unless due to natural causes.~~

Readopt with amendment Env-Wq 1707.01, eff. 5-21-08 (doc. #9162), to read as follows:

Env-Wq 1707.01 Designation.

(a) Mixing zones shall be prohibited in Class A waters, **except for discharges that meet the criteria specified in Env-Wq 1708.06(b)(1)-(2).**

(b) For Class B waters, the department shall designate a limited area or volume of the surface water as a mixing zone if the applicant provides sufficient scientifically valid documentation to allow the department to independently determine that all criteria in Env-Wq 1707.02 have been met.

[Note: This section was not in the original draft approved by the WQSAC in 2009. It was added to deal comprehensively with all of the class A language in the regulations.]

Readopt with amendment Env-Wq 1708.06, eff. 5-21-08 (doc. #9162), to read as follows:

Env-Wq 1708.06 Protection of Class A Waters.

(a) In accordance with RSA 485-A:8, I, discharges of sewage or waste to Class A waters shall be prohibited.

(b) Proposed new or increased activities ***affecting class A waters*** that the department determines do not involve the discharge of sewage or ***industrial waste*** ***shall not constitute a discharge under RSA 485-A:8, I, RSA 485-A:13, I(a), Env-Wq 1703.14(c), or Env-Wq 1708.06(a) if the activity shall be reviewed in accordance with Env-Wq 1708.01 through Env-Wq 1708.12:***

(1) Will not result in any degradation of water quality; or

(2) Has been reviewed under the process specified in Env-Wq 1708.10 and determined by the department to meet the criteria specified for approval in Env-Wq 1708.10(b)(1)-(3).

(c) Water may be treated to comply with the requirements of this section.

[Note: This section has changed from the original draft approved by the WQSAC in 2009. The original intent of requiring an antidegradation review for activities that impact in class A waters was retained, but it was reworded.]

Additional Proposed Rule Changes Related to Antidegradation and Water Transfers

Readopt with amendment Env-Wq 1702.03, eff. 5-21-08 (doc. #9162), to read as follows:

Env-Wq 1702.03 “Assimilative capacity” means the amount of a pollutant or pollutants or the ***volume or flow rate for water*** that can safely be released to ***or withdrawn from*** a waterbody ~~or the volume~~ without causing violations of applicable water quality criteria or ~~negatively impacting~~ ***impairing existing or designated*** uses.

[Note: This definition change is being proposed because “remaining assimilative capacity” is a critical measure for any antidegradation review. Env-Wq 1708.02 states that antidegradation applies to discharges and flow alterations. However, Env-Wq 1702.03 only defines assimilative capacity in terms of discharge of pollutants. The definition has been revised to include flow alteration.]

Readopt with amendment Env-Wq 1708.12, eff. 8-23-11 (doc. #9984), to read as follows:

Env-Wq 1708.12 Transfer of Water.

(e) If a transfer is exempt under (b), above, or if all of the conditions specified in (c), above, are met, the transfer of water shall not constitute a discharge under RSA 485-A:8, I, ~~or~~ RSA 485-A:13, I(a), ***Env-Wq 1703.14(c), or Env-Wq 1708.06(a).***

[Note: This edit is needed to avoid inconsistencies between the prohibition of discharges to class A waters in different sections of the rules.]